Figure 1: Identification of genes involved in Alzheimer's Disease pathology

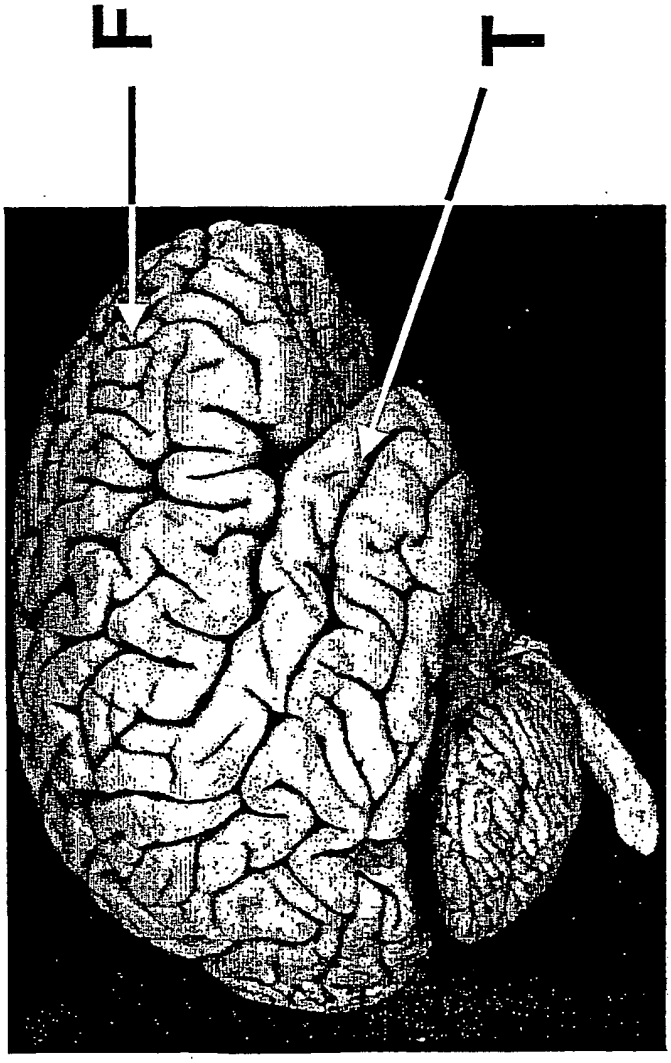

Figure 2: Differential expression of the TB2 gene as determined by RT- PCR analysis

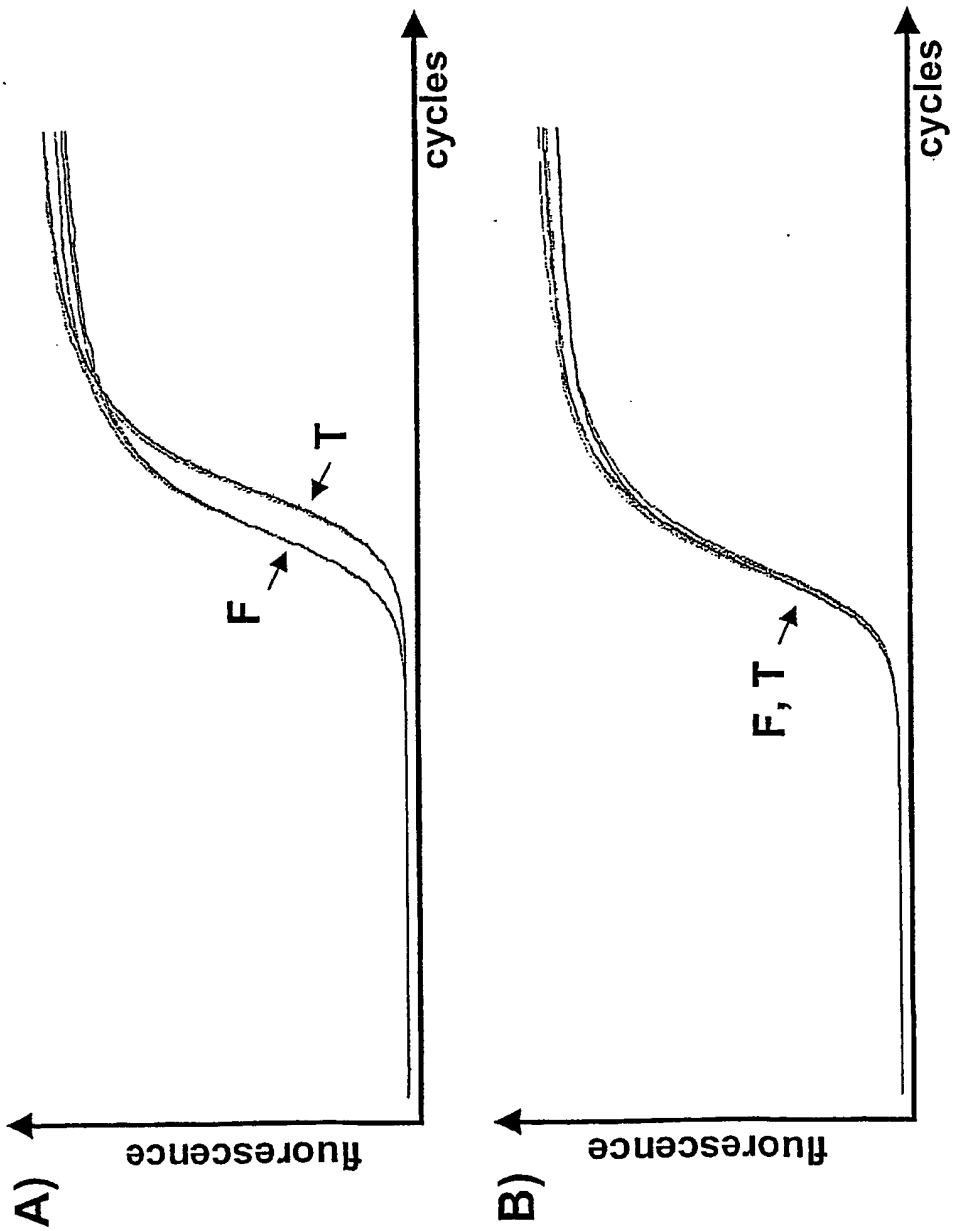

Figure 3: Differential expression of the TB2 gene as determined by RT- PCR analysis

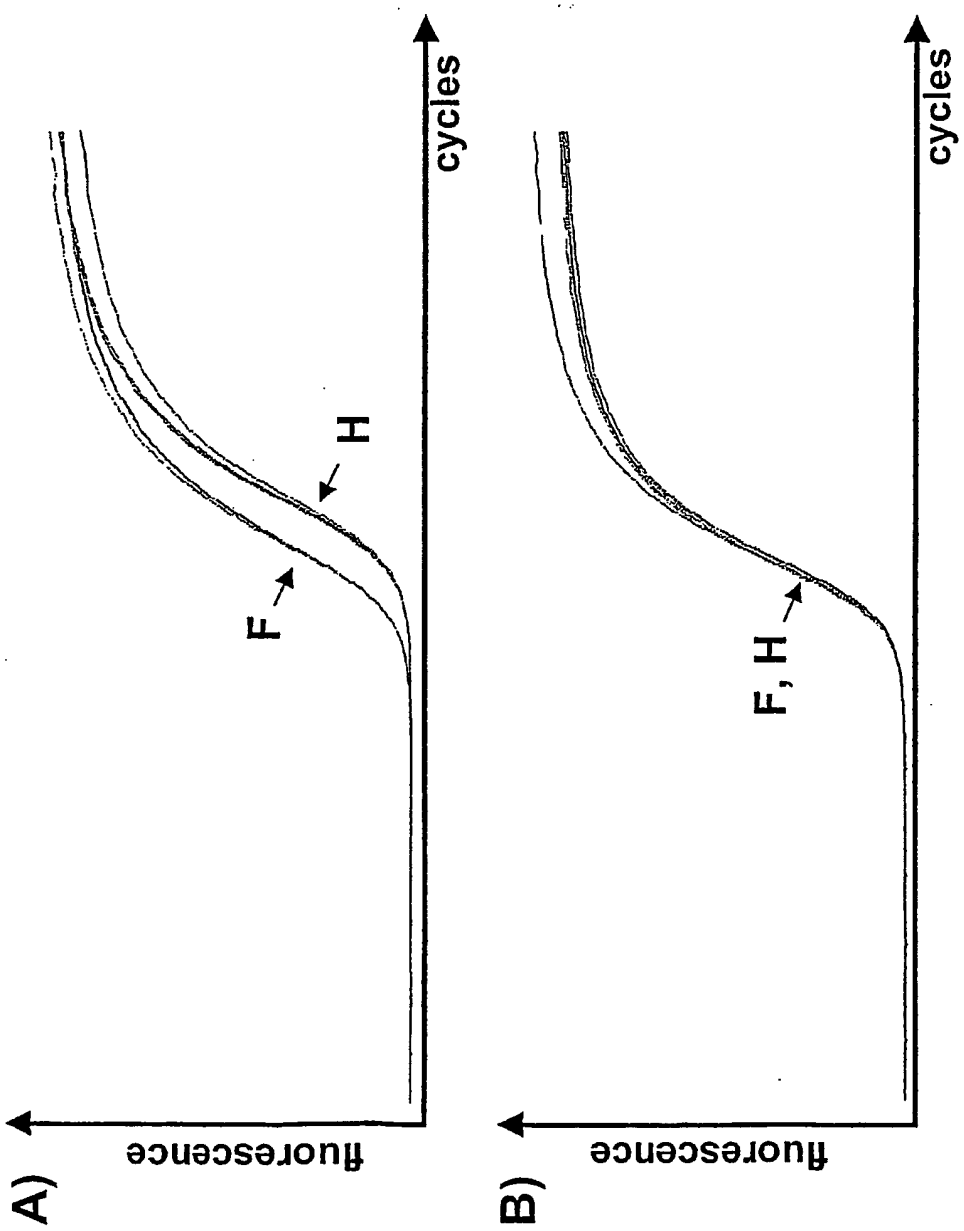

Figure 4: SEQ ID NO. 1; amino acid sequence of human TB2 protein

Length: 185 aa

```
  1  MRERFDRFLH EKNCMTDLLA KLEAKTGVNR SFIALGVIGL VALYLVFGYG
 51  ASLLCNLIGF GYPAYISIKA IESPNKEDDT QWLTYWVVYG VFSIAEFFSD
101  IFLSWFPFYY MLKCGFLLWC MAPSPSNGAE LLYKRIIRPF FLKHESQMDS
151  VVKDLKDKSK ETADAITKEA KKATVNLLGE EKKST
```

Figure 5: SEQ ID NO. 2

Length: 461 bp

```
  1  ACCTGGTGTT CGGTTATGGG GCCTCTCTCC TCTGCAACCT GATAGGATTT
 51  GGCTACCCAG CCTACATCTC AATTAAAGCT ATAGAGAGTC CCAACAAAGA
101  AGATGATACC CAGTGGCTGA CCTACTGGGT AGTGTATGGT GTGTTCAGCA
151  TTGCTGAATT CTTCTCTGAT ATCTTCCTGT CATGGTTCCC CTTCTACTAC
201  ATGCTGAAGT GTGGCTTCCT GTTGTGGTGC ATGGCCCCGA GCCTTCTAAT
251  GGGGCTGAAC TGCTCTACAA GCGCATCATC CGGCCTTTCT TCCTGAAGCA
301  CGAGTCCCAG ATGGACAGTG TGGTCAAGGA CCTTAAAGAC AAGGCCAAAG
351  AGACTGCAGA TGCCATCACT AAAGAAGCGA AGAAAGCTAC CGTGAATTTA
401  CTGGGTGAAG AAAAGAAGAG CACCTAAACC AGACTGGATG GAAACTTCCT
451  GCCCTCTCTG T
```

Figure 6: Schematic alignment of SEQ ID NO. 2 to human TB2 cDNA (GenBank accession number BC000232)

Figure 7: Sequence alignment of SEQ ID NO. 2 to nucleotides 168-629 of human TB2 cDNA (GenBank accession number BC000232)

Length: 461 bp

```
  1 ACCTGGTGTTCGGTTATGGGGCCTCTCTCCTCTGCAACCTGATAGGATTT 50
    |||||||||||||||||| ||||||||||||||||||||||||||||||
168 ACCTGGTGTTCGGTTATGGAGCCTCTCTCCTCTGCAACCTGATAGGATTT 217
              .         .         .         .         .
 51 GGCTACCCAGCCTACATCTCAATTAAAGCTATAGAGAGTCCCAACAAAGA 100
    ||||||||||||||||||||||||||||||||||||||||||||||||||
218 GGCTACCCAGCCTACATCTCAATTAAAGCTATAGAGAGTCCCAACAAAGA 267
              .         .         .         .         .
101 AGATGATACCCAGTGGCTGACCTACTGGGTAGTGTATGGTGTGTTCAGCA 150
    ||||||||||||||||||||||||||||||||||||||||||||||||||
268 AGATGATACCCAGTGGCTGACCTACTGGGTAGTGTATGGTGTGTTCAGCA 317
              .         .         .         .         .
151 TTGCTGAATTCTTCTCTGATATCTTCCTGTCATGGTTCCCCTTCTACTAC 200
    ||||||||||||||||||||||||||||||||||||||||||||||||||
318 TTGCTGAATTCTTCTCTGATATCTTCCTGTCATGGTTCCCCTTCTACTAC 367
              .         .         .         .         .
201 ATGCTGAAGTGTGGCTTCCTGTTGTGGTGCATGGCCCCGAG.CCTTCTAA 249
    |||||||||||||||||||||||||||||||||||||||| ||||||||
368 ATGCTGAAGTGTGGCTTCCTGTTGTGGTGCATGGCCCCGAGCCCTTCTAA 417
              .         .         .         .         .
250 TGGGGCTGAACTGCTCTACAAGCGCATCATCCGGCCTTTCTTCCTGAAGC 299
    |||||||||||||||||||||||||||||| ||||||||||||||||
418 TGGGGCTGAACTGCTCTACAAGCGCATCATCCGTCCTTTCTTCCTGAAGC 467
              .         .         .         .         .
300 ACGAGTCCCAGATGGACAGTGTGGTCAAGGACCTTAAAGACAAGGCCAAA 349
    |||||||||||||||||||||||||||||||||||||||||||||||||
468 ACGAGTCCCAGATGGACAGTGTGGTCAAGGACCTTAAAGACAAGGCCAAA 517
              .         .         .         .         .
350 GAGACTGCAGATGCCATCACTAAAGAAGCGAAGAAAGCTACCGTGAATTT 399
    |||||||||||||||||||||||||||||||||||||||||||||||||
518 GAGACTGCAGATGCCATCACTAAAGAAGCGAAGAAAGCTACCGTGAATTT 567
              .         .         .         .         .
400 ACTGGGTGAAGAAAAGAAGAGCACCTAAACCAGACTGGATGGAAACTTCC 449
    |||||||||||||||||||||||||||||||||||||||||||||||||
568 ACTGGGTGAAGAAAAGAAGAGCACCTAAACCAGACTGGATGGAAACTTCC 617
              .
450 TGCCCTCTCTGT 461
    ||||||||||||
618 TGCCCTCTCTGT 629
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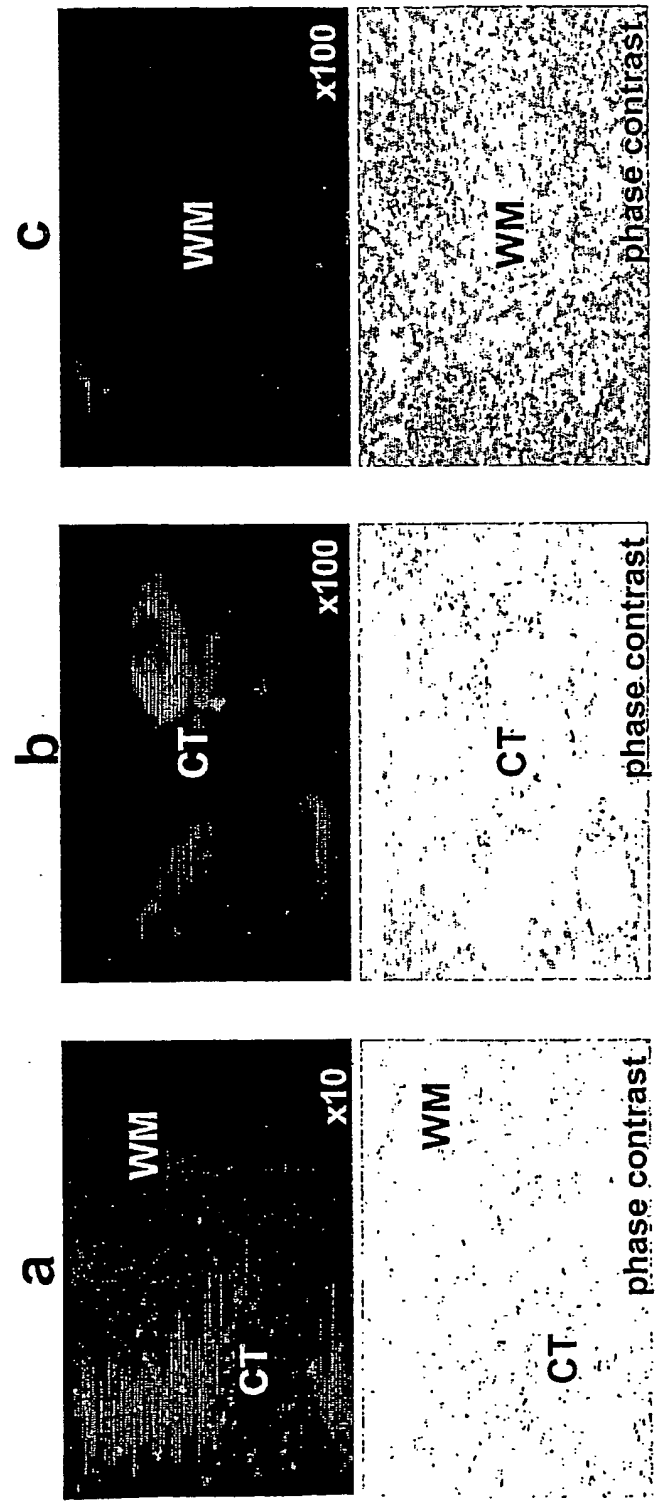

Fig. 8: Images of human cerebral sections labeled with anti-TB2 antiserum and with DAPI

Table 1: Identification of differentially expressed genes in microarray hybridization experiments

Biochip	Type of probe	Used probes (Cy5-/Cy3-labeled)	Ratio fluorescence intensity:
1	C	$PT_{SSH(2)}$ / $PF_{SSH(1)}$	0.73
2	B	PT / PF	0.73
4	C	$PT_{SSH(4)}$ / $CT_{SSH(3)}$	0.32
7	B	CF / PF	0.27

Table 2 :

sample	Δ (fold) (frontal / temporal cortex)
control C011	1.26
control C012	1.09
control C014	1.00
control C005	0.99
control C008	0.98
patient P012	1.99
patient P016	1.60
patient P010	0.59
patient P011	1.38
patient P014	0.95
patient P017	1.57
patient P019	1.78

Table 3 :

sample	Δ (fold) (frontal cortex / hippocampus)
control C005	0.81
control C008	0.85
control C004	1.74
patient P012	1.98
patient P016	1.61
patient P010	0.89
patient P011	1.18
patient P014	0.79
patient P019	1.63